

ECTS Syllabus

Course title	Functional Rehabilitation				
Course code	MPTR-518				
Course type	Face to face				
Level	2 nd Cycle				
Year / Semester	1 st /2 nd				
Teacher's name	Dr Manos Stefanakis				
ECTS	5	Lectures / week	2hrs	Laboratories / week	
Course purpose and objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> • Provide students with the ability to organize and execute a complete program of functional rehabilitation. • Help students describe the pathology, pathophysiology, clinical presentation, phases of tissue healing and the different stages of rehabilitation of any given musculoskeletal dysfunction. • Help students to clinically justify the adaptation of a rehabilitation program with respect to the tissue healing stages. • Understand the psycho-social factors that affect the rehabilitation process and organize the program accordingly. 				
Learning outcomes	<p>After completion of the course students are expected to be able to:</p> <ol style="list-style-type: none"> 1. Understand the pathology, pathophysiology of any given patient with musculoskeletal dysfunction. 2. Have knowledge of the different tissue healing phases as well as the biomechanical factors that can affect the patient they are treating. 3. Understand the subjective and objective examination procedures of a patient with musculoskeletal dysfunction. 4. Choose the correct outcome measures in order to assess the effectiveness of their treatment approaches based on up-to-date evidence. 5. Create realistic treatment goals based on the patients' special needs 6. Organize a complete treatment program for the functional rehabilitation of the patient 7. Back-up their treatment and outcome measures choices 8. Perform a comprehensive subjective and objective assessment of any given patient 9. Apply techniques, exercises and physical modalities for the rehabilitation of any given patient 10. Teach the patient self-treatment approaches as well as exercises for the maintenance and improvement of the treatment effectiveness. 11. Re-assess the treatment effectiveness with up-to-date outcome measures 12. Present their treatment choices in the form of a case study presentation in front of 				

	colleagues.																							
Prerequisites	None	Required	None																					
Course content	<ol style="list-style-type: none"> 1. Assessment and functional rehabilitation of musculoskeletal disorders of the lumbar spine, hip, knee and foot complex 2. Assessment and treatment of the nerve tissue of the upper and lower quadrant 3. Indications, contraindications and precautions for mechanical treatment of the upper and lower quadrant 4. Classification of musculoskeletal disorders of the lower quadrant and therapeutic algorithms 5. Mechanical presentation and classification of the most common musculoskeletal disorders of the upper and lower quadrant (discogenic pain, tendinopathies, bursitis, sprains, peripheral neuropathies etc.) 6. Physiological adaptations of sport activities 7. Healing phases of the sports trauma 8. Assessment and treatment of sports injuries 9. Plyometric exercise of tendinopathies of the upper quadrant 10. Problems with kinetic control of the upper quadrant 11. Assessment of muscle strength, range of motion, endurance and proprioception 12. Assessment and rehabilitation in specific sports 13. First aids in the field 																							
Teaching methodology	Face to face, Class lectures, class debates, practical sessions in physio labs, case studies																							
Bibliography	Required Textbooks / Readings: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Title</th> <th style="text-align: left;">Author(s)</th> <th style="text-align: left;">Publisher</th> <th style="text-align: left;">Year</th> <th style="text-align: left;">ISBN</th> </tr> </thead> <tbody> <tr> <td>Examination of Orthopedic and Athletic Injuries</td> <td>Starkey C, Ryan J & Brown S</td> <td>Davis</td> <td>2015</td> <td>9780803645035</td> </tr> <tr> <td>Physical Rehabilitation of the Injured Athlete. Illustrated</td> <td>Andrews J, Harrelson G & Wilk K</td> <td>Saunders</td> <td>2012</td> <td>9781437724110</td> </tr> <tr> <td>Maitland's Vertebral Manipulation, Vol I & II, 8th ed</td> <td>Hengeveld E & Banks K</td> <td>Churchill Livingstone</td> <td>2013</td> <td>9780702040665</td> </tr> </tbody> </table>				Title	Author(s)	Publisher	Year	ISBN	Examination of Orthopedic and Athletic Injuries	Starkey C, Ryan J & Brown S	Davis	2015	9780803645035	Physical Rehabilitation of the Injured Athlete. Illustrated	Andrews J, Harrelson G & Wilk K	Saunders	2012	9781437724110	Maitland's Vertebral Manipulation, Vol I & II, 8 th ed	Hengeveld E & Banks K	Churchill Livingstone	2013	9780702040665
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Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Sports Rehabilitation and Injury Prevention	Comfort P & Abrahamson E	Wiley & Blackwell	2010	9780470975893
Clinical Sports Medicine, 5 th ed.	Brukner P & Khan K	McGraw-Hill	2016	9781743761380
Manual Mobilization of the Joints Vol I (Extremities) & II (Spine), 7 th ed.	Kaltenborn F	Orthopedic Physical Therapy Products	2011	9788270540709
A System of Orthopaedic Medicine, 3 rd ed	Ombregt L, Bisschop P, ter Veer HJ	Churchill Livingstone	2013	9780702052958
Rehabilitation Of Sports Injuries: Scientific Basis	Walter R. Frontera	John Wiley & Sons	2008	9781405140560
Scientific foundations and principles of practice in musculoskeletal rehabilitation	Magee, D.J. et al	Saunders	2007	9781416002505
Orthopedic Physical Assessment 6 th ed.	Magee, D.J	Saunders	2013	9781455709779
Sports Medicine. A Comprehensive	Scuderi G & Mc Can P	Mosby, Elsevier	2005	9780323023450



	Approach, 2nd ed.				
Assessment	Class participation, mini projects, mid-term exams, final exams.				
Language	English				